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Coding Bootcamp

Full-Time & Part-Time Syllabus

Become a Next-Gen Full-Stack
Web Developer in 13-22 Weeks:
Coding Essentials + Generative AI

Gain the essential skills you need to keep up with today's
tech industry and stay ahead of future innovations.

JS · CSS · HTML5 · React · node JS

Express · PostgreSQL · Visual Studio Code · git

ChatGPT · GitHub Copilot · Copilot

APPLY NOW

Why Choose the LSU Coding Bootcamp?

Learn Generative AI-Integrated Full-Stack Development

Construct innovative software solutions by embedding advanced generative AI functionality within a comprehensive full-stack program.

Learn From Industry-Experienced Instructors With Real-World Knowledge

Acquire real-world skills through instruction from industry-experienced professionals.

Gain In-Demand Skills Through a Career-Driven Curriculum

From core fundamentals to advanced full-stack development, the curriculum prepares you for a thriving tech career.

Get 1:1 Personalized Career Coaching and Job-Search Support

Receive tailored career coaching and job search support to help you secure your ideal tech role.

Beginner-Friendly: Kickstart Your Coding Career

Even without prior tech experience, our program will equip you with the skills to start a rewarding career in tech.

Create a Portfolio to Showcase Your Skills

Develop a portfolio of real-world projects, including a capstone, to demonstrate your abilities to potential employers.

Earn a Certificate of Completion

Upon bootcamp graduation, you'll earn a Certificate of Completion by LSU and Fullstack Academy, validating your industry-ready skills.

Join a Powerful Alumni Network

Gain access to a vast network of 10,000+ supportive Fullstack Academy alumni who can help open doors to lucrative job opportunities.

The Louisiana State University and Fullstack Academy Partnership

Fullstack Academy is one of the longest-running and most reputable bootcamp providers in the nation, with incredible student reviews, years of experience in education, and impressive graduate outcomes.

Through Fullstack Academy's active learning approach, the Louisiana State University helps open doors to opportunities in Louisiana, remotely, and beyond!

The Fullstack Academy Difference

Founded in 2012, Fullstack Academy is a pioneering and top-rated bootcamp provider that has helped over 10,000 graduates to launch or accelerate their careers in tech.

Fullstack Inclusion

Fullstack can help make your career goals possible, no matter your background. We're committed to providing a welcoming, diverse, and flexible learning environment.

Fullstack Experience

Fullstack's rigorous curriculum focuses on the skills top-tier tech employers are seeking. Guided by passionate instructors and a caring career success team to assist with everything from interview prep to salary negotiations, you'll gain the confidence you need to build a fulfilling career.

Fullstack Outcomes

We're obsessed with helping our students succeed, and it shows: 1,500+ companies across the U.S. have hired our graduates — including notable companies like Google, Amazon, LinkedIn, Bloomberg, Spotify, and Etsy.

Support in Bootcamp and Beyond

Throughout the bootcamp and beyond, the Fullstack Academy team is committed to helping you land the ideal tech role for you.

Proven Employment Outcomes

1,500+ companies across the U.S. have hired our grads—everywhere from large tech firms to mid-size companies and innovative start-ups.

Professional Career Coaching

Fullstack Academy grads have the competitive advantage of career coaching and practical experience to land a meaningful role.

A Built-In Network

You'll join our expansive network of alums—building lasting connections to support you throughout your career.

Perks of a Part-Time Bootcamp:

Learn at a balanced pace.

Maintain your job and other commitments.

Get the same immersive curriculum, covering in-demand tools and technologies, as our full-time program, with the added work-life balance of our part-time option.

Perks of a Full-Time Bootcamp:

Accelerate your skill development for expedited entry into the job market.

Explore the same comprehensive curriculum as the part-time option, but in a full-time format.

Curriculum Concepts

Unit 1
Front-End Foundations

Get started with web development! This unit covers the foundational skills for building interactive and engaging websites. You'll set up your coding environment, learn the essentials of Git for version control, and learn the core front-end languages: HTML, CSS, and JavaScript. You'll also learn the principles of responsive web design.

Key Learning Objectives

- Set up a development environment.
- Use Git for version control.
- Build web page structures with HTML.
- Style web pages with CSS.
- Implement basic interactivity with JavaScript.
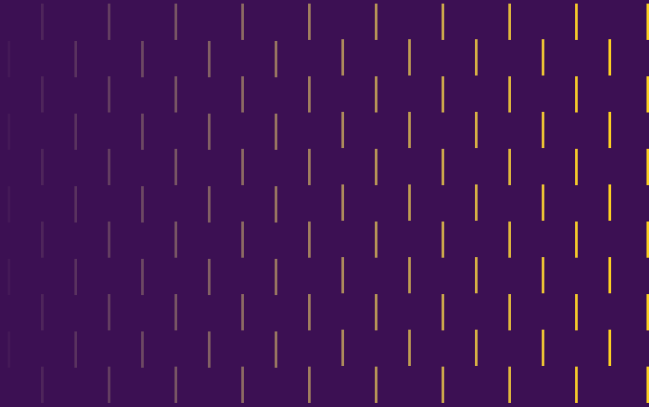- Design responsive websites.

Key Skills

- HTML Structure and Semantics
- CSS Styling
- JavaScript Fundamentals
- Git Version Control
- Responsive Design

Tools & Technologies

*Curriculum is subject to change.

Unit 2
Essentials of Generative AI

Explore the exciting world of generative AI and large language models (LLMs). This unit introduces you to the core concepts of AI-powered content creation, from understanding how prompts work to optimizing models.

Key Learning Objectives

◆ Learn key concepts of generative AI and LLMs.

◆ Develop prompt engineering skills.

◆ Explore different GPTs.

Key Skills

◆ Generative AI Foundations

◆ Prompt Engineering

◆ Fine-Tuning Prompts

Tools & Technologies

ChatGPT

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Unit 3
Front-End Development

Build interactive and dynamic web applications using core JavaScript concepts. This unit covers essential concepts such as control flow, conditionals, functions, loops & arrays, events, promises, and test-driven development. You'll also learn to manipulate the Document Object Model (DOM).

Key Learning Objectives

◆ Learn advanced JavaScript concepts.

◆ Implement control flow and handle events.

◆ Manipulate the DOM.
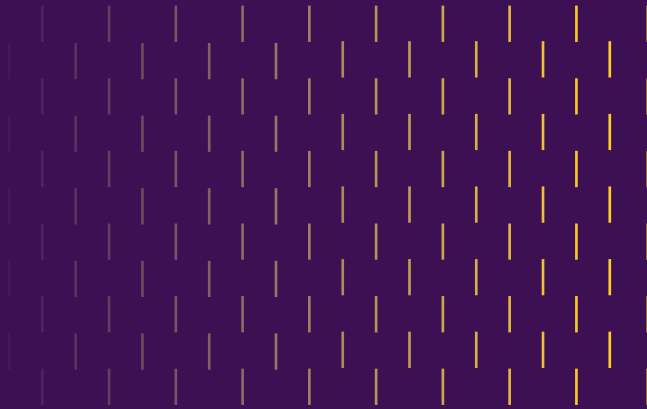
◆ Implement test-driven development (TDD).

Key Skills

◆ DOM Manipulation   ◆ JavaScript   ◆ Programming   ◆ TDD

Tools & Technologies

git   JS   Visual Studio Code   HTML5   CSS3

*Curriculum is subject to change.

Unit 4
Front-End Libraries

Learn to build complex and scalable user interfaces using React. This unit covers component-based architecture, state management, data fetching, and routing. You'll gain practical experience building interactive applications with React.

Key Learning Objectives

- Understand React components and JavaScript XML (JSX).
- Handle component state and props.
- Fetch and display data using React hooks.

- Implement routing.
- Manage global state.

Key Skills

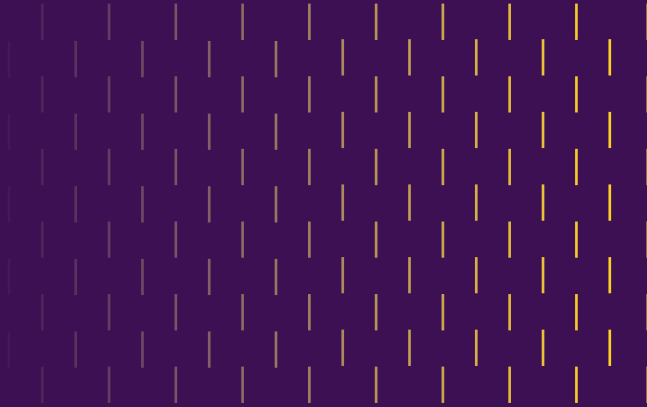- API Interaction in React
- React Component Architecture
- React Router
- State Management

Tools & Technologies

*Curriculum is subject to change.

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Unit 5
Designing Applications With Generative AI

Discover how to use generative AI for application design. This unit shows you how generative AI can improve UI/UX, speed up architectural planning, and start initial code drafts.

Key Learning Objectives

◆ Integrate generative AI into UI/UX design workflows.

◆ Experiment with generative AI code generation tools.

◆ Utilize generative AI to streamline architectural planning.

◆ Optimize user flows using generative AI-driven insights.

Key Skills

◆ Generative AI-Assisted UI/UX Design

◆ Generative AI-Powered Architectural Planning
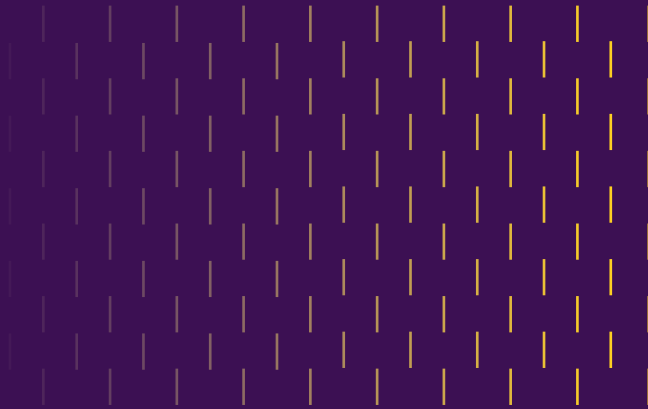
Tools & Technologies

Figma   Framer   Microsoft Designer   uizard

*Curriculum is subject to change.

Unit 6
Back-End Development

Get hands-on experience building robust and scalable server-side apps with Node.js, Express, and Structured Query Language (SQL). You'll learn how to create application programming interfaces (APIs), design databases, implement user authentication, and build secure server-side logic.

Key Learning Objectives

◆ Build RESTful APIs.

◆ Design and build SQL databases.

◆ Implement user authentication.

◆ Learn server-side architecture.

Key Skills

◆ API Design

◆ Node.js and Express.js Development

◆ SQL Database Management

Tools & Technologies

node.js   Express   JWT   PostgreSQL   Visual Studio Code   bcrypt   git

*Curriculum is subject to change.

Unit 7

Smart Coding and Testing With Generative AI

Discover how generative AI can revolutionize your coding and testing workflows.

This unit explores AI-assisted code generation, migration, optimization, and testing.

Key Learning Objectives

- Use generative AI to generate code.

- Apply generative AI to migrate code.

- Leverage generative AI to optimize code.
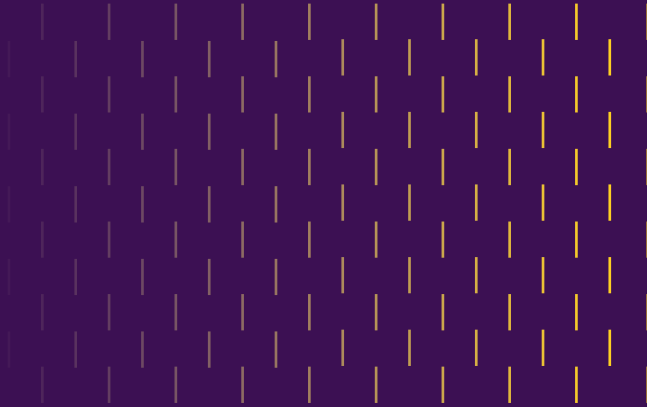
- Automate testing using generative AI.

Key Skills

- Generative AI-Assisted Coding

- Code Migration With Generative AI

- Generative AI-Powered Testing

Tools & Technologies

ChatGPT   GitHub Copilot   Copilot   MOSTLY·AI   testRigor

*Curriculum is subject to change.

Unit 8

Algorithms and Data Structures

Master algorithms and data structures—
the building blocks of efficient code.

This unit covers algorithm analysis, data
structures, and essential algorithms (searching,
sorting, recursion).

Key Learning Objectives

◆ Understand algorithm analysis.

◆ Build data structures.

◆ Apply searching and sorting techniques.

◆ Explore graph algorithm concepts.

Key Skills

◆ Algorithm
Analysis

◆ Data Structure
Implementation

◆ Graph Algorithms

◆ Searching and Sorting
Algorithms

Tools & Technologies

*Curriculum is subject to change.
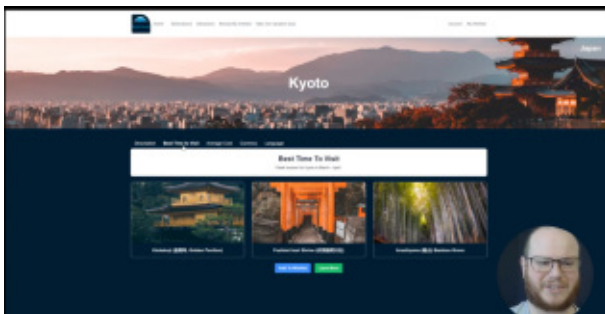
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Unit 9
Full-Stack Development Capstone Project

Apply your full-stack skills to develop a real-world web application, gain practical experience, and build a portfolio-ready project that demonstrates your proficiency to employers.
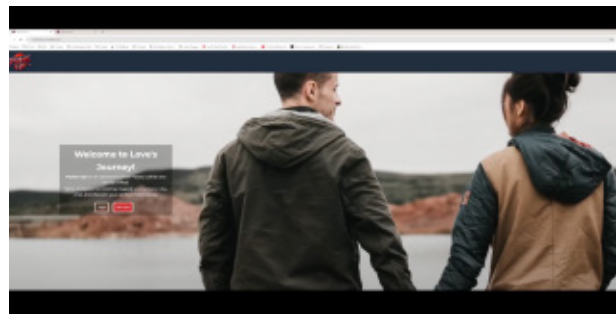
Key Learning Objectives

- Implement full-stack development.
- Working in a dev team.

Watch Example Videos of Capstone Projects

Blissful Journey
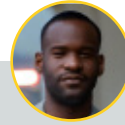A travel planning website

Pucker Up
A dating website

*Curriculum is subject to change.

Testimonials

Ariane Rubin
Software Engineer at Entitled

"The support I received was instrumental to my success. The instructors were knowledgeable and always available for questions, fostering a collaborative environment where students could learn from each other."
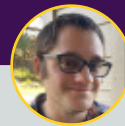
Isaias Julio
Engineer Technical Services 1

"My career coach's guidance was crucial in helping me understand the tech industry landscape and ultimately secure my role."

Emilia Carotti
Associate Software Engineer at Capital One

"I learned everything I needed to be a competitive potential candidate with an edge against my peers."

Mark Hario
Senior Software Engineer at Crafted

"The curriculum is constantly updated and delivered by first-rate, passionate educators. The positivity and encouragement was awesome."

Career Success Services

Starting in the bootcamp, you'll receive guidance and tools you'll need to power your job search.

Upon bootcamp graduation, and for a full year beyond, you'll have the opportunity to opt into the Fullstack Academy Career Success Program and access 1:1 personalized career coaching to help achieve your desired career outcome.

Interview Prep

◆ Mock Standard Interviews (Q&A)

Workshops

◆ How to Pitch Yourself

◆ Technical Resume Guidance

◆ LinkedIn Optimization

◆ Navigating the Job Search Process

◆ Job Application Best Practices

◆ Salary Negotiation

◆ Interview Answer Prep

◆ Leveraging Transferable Skills

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